SUBJECT INDEX

Acceleration

Automated Data Acquisition System for Monitoring Cement Hydration, William J. McCarter and Ali B. Afshar, CP Jan. 87 p50-60.

Algorithms

Genetic Algorithms in Pipeline Optimization, David E. Goldberg and Chie Hsiung Kuo, CP Apr. 87 p128-141.

Beams

Tapered Beam and Column Elements in Unbraced Frame Structures, J. Dario Aristizabal-Ochoa, CP Jan. 87 p35-49.

Biaxial bending

Expert Interactive Design of R/C Columns Under Biaxial Bending, Russel Sacks and Oral Buyukozturk, CP Apr. 87 p69-81.

Boundary element method

Boundary Element Method in Drawdown Seepage Analysis for Earth Dams, Ching S. Chang, CP Apr. 87 p83-98.

Cements

Automated Data Acquisition System for Monitoring Cement Hydration, William J. McCarter and Ali B. Afshar, CP Jan. 87 p50-60.

Columns

Expert Interactive Design of R/C Columns Under Biaxial Bending, Russel Sacks and Oral Buyukozturk, CP Apr. 87 p69-81.

Tapered Beam and Column Elements in Unbraced Frame Structures, J. Dario Aristizabal-Ochoa, CP Jan. 87 p35-49.

Computer analysis

Tapered Beam and Column Elements in Unbraced Frame Structures, J. Dario Aristizabal-Ochoa, CP Jan. 87 p35-49.

Computer graphics

B-Spline Terrain Modeling on a Personal Computer, Desmond J. Walton, CP July 87 p162-174.

Finite Element Microcomputer Well Drawdown System, John T. Christian and Denise Wilton Tripp, CP July 87 p143-161.

Graphic Input to Cyclone, Leland S. Riggs, CP July 87 p175-182.

Interactive Layout Optimization of Trusses, H. Adeli and K. V. Balasubramanyam, CP July 87 p183-196.

Computer models

Microcomputer-Based Multiobjective Personnel Management Model, Steven C. Egly and Jeff R. Wright, CP Apr. 87 p114-127.

Computer programming

Software for Expert Systems Development, Leonard Ortolano and Catherine D. Perman, CP Oct. 87 p225-240.

David J. Elton, CP Apr. 87 p99-113.

Computer programs

Settlement of Footings on Sand by CPT Data, David J. Elton, CP Apr. 87 p99-113.

Computer software

Microcomputers in Civil Engineering: Use and Misuse, J. Brent Gifford, CP Jan. 87 p61-68.

Use of Spread Sheets in Small Firms, James J. Yarmus, CP July 87 p217-219.

Computerized analysis

Expert Interactive Design of R/C Columns Under Biaxial Bending, Russel Sacks and Oral Buyukozturk, CP Apr. 87 p69-81.

Concrete, reinforced

Expert Interactive Design of R/C Columns Under Biaxial Bending, Russel Sacks and Oral Buyukozturk, CP Apr. 87 p69-81.

Cone penetration tests

Settlement of Footings on Sand by CPT Data,

Construction engineering

Expert Systems in Construction: Work in Progress, David B. Ashley and rRaymond E. Levitt, CP Oct. 87 p303-311.

Construction management

Expert System for Construction Planning, Chris Hendrickson, Carlos Zozaya-Gorostiza, Daniel Rehak, Eduardo Baracco-Miler and Peter Lim, CP Oct. 87 p253-269.

Expert Systems in Construction: Work in Progress, David B. Ashley and rRaymond E. Levitt, CP Oct. 87 p303-311.

Construction planning

Expert Systems in Construction: Work in Progress, David B. Ashley and rRaymond E. Levitt, CP Oct. 87 p303-311.

Curricula

Microcomputers in Civil Engineering: Use and Misuse, J. Brent Gifford, CP Jan. 87 p61-68.

Dams, earth

Boundary Element Method in Drawdown Seepage Analysis for Earth Dams, Ching S. Chang, CP Apr. 87 p83-98.

Data collection

Automated Data Acquisition System for Monitoring Cement Hydration, William J. McCarter and Ali B. Afshar, CP Jan. 87 p50-60.

Development shells

Software for Expert Systems Development, Leonard Ortolano and Catherine D. Perman, CP Oct. 87 p225-240.

Dielectrical constant

Automated Data Acquisition System for Monitoring Cement Hydration, William J. McCarter and Ali B. Afshar, CP Jan. 87 p50-60.

Drainage systems

LOTUS Spreadsheet Design for Storm Drain Networks, Kevin G. Brown and Antonis D. Koussis, CP July 87 p197-213.

Drawdown

Boundary Element Method in Drawdown Seepage Analysis for Earth Dams, Ching S. Chang, CP Apr. 87 p83-98.

Finite Element Microcomputer Well Drawdown System, John T. Christian and Denise Wilton Tripp, CP July 87 p143-161.

Droughts

Expert System for Drought Management Planning, Richard N. Palmer and Robert M. Tull, CP Oct. 87 p284-297.

Earthquake resistant structures

Tapered Beam and Column Elements in Unbraced Frame Structures, J. Dario Aristizabal-Ochoa, CP Jan. 87 p35-49.

Electrical resistivity

Automated Data Acquisition System for Monitoring Cement Hydration, William J. McCarter and Ali B. Afshar, CP Jan. 87 p50-60.

Engineering education

Microcomputers in Civil Engineering: Use and Misuse, J. Brent Gifford, CP Jan. 87 p61-68.

Engineering firms

Use of Spread Sheets in Small Firms, James J. Yarmus, CP July 87 p217-219.

Environmental engineering

New Expert Systems in Environmental Engineering, Leonard Ortolano and Anne C. Steinemann, CP Oct. 87 p298-302.

Ethics

Microcomputers in Civil Engineering: Use and Misuse, J. Brent Gifford, CP Jan. 87 p61-68.

Expert systems

Expert Interactive Design of R/C Columns Under Biaxial Bending, Russel Sacks and Oral Buyukozturk, CP Apr. 87 p69-81.

Expert System for Construction Planning, Chris Hendrickson, Carlos Zozaya-Gorostiza, Daniel Rehak, Eduardo Baracco-Miler and Peter Lim, CP Oct. 87 p253-269.

Expert System for Drought Management Planning, Richard N. Palmer and Robert M. Tull, CP Oct. 87 p284-297.

Expert Systems for Geotechnical Engineers, J. C. Santamarina and J. L. Chameau, CP Oct. 87 p241-252.

Expert Systems for Structural Design, Mary Lou Maher, CP Oct. 87 p276-283.

Expert Systems in Construction: Work in Progress, David B. Ashley and rRaymond E. Levitt, CP Oct. 87 p303-311.

Expert Systems in Structural Engineering: Works in Progress, R. H. Allen, CP Oct. 87 p312-319.

New Expert Systems in Environmental Engineering, Leonard Ortolano and Anne C. Steinemann, CP Oct. 87 p298-302.

Software for Expert Systems Development, Leonard Ortolano and Catherine D. Perman, CP Oct. 87 p225-240.

Footings

Settlement of Footings on Sand by CPT Data, David J. Elton, CP Apr. 87 p99-113.

Frame design

Microcomputer-Aided Optimal Plastic Design of Frames, Hojjat Adeli and Hui-Huang Chyou, CP Jan. 87 p20-34.

Framed structures

Tapered Beam and Column Elements in Unbraced Frame Structures, J. Dario Aristizabal-Ochoa, CP Jan. 87 p35-49.

Geotechnical engineering

Expert Systems for Geotechnical Engineers, J. C. Santamarina and J. L. Chameau, CP Oct. 87 p241-252.

Hazardous waste

New Expert Systems in Environmental Engineering, Leonard Ortolano and Anne C. Steinemann, CP Oct. 87 p298-302.

Hydrogeology

Finite Element Microcomputer Well Drawdown System, John T. Christian and Denise Wilton Tripp, CP July 87 p143-161.

Interactive graphics

Interactive Layout Optimization of Trusses, H. Adeli and K. V. Balasubramanyam, CP July 87 p183-196.

Microcomputer-Aided Optimal Plastic Design of Frames, Hojjat Adeli and Hui-Huang Chyou, CP Jan. 87 p20-34.

Interactive systems

Expert Interactive Design of R/C Columns Under Biaxial Bending, Russel Sacks and Oral Buyukozturk, CP Apr. 87 p69-81.

Job analysis

Microcomputer-Based Multiobjective Personnel Management Model, Steven C. Egly and Jeff R. Wright, CP Apr. 87 p114-127.

Layout

Interactive Layout Optimization of Trusses, H. Adeli and K. V. Balasubramanyam, CP July 87 p183-196.

Mathematical models

New Expert Systems in Environmental Engineering, Leonard Ortolano and Anne C. Steinemann, CP Oct. 87 p298-302.

Microcomputers

Automated Data Acquisition System for Monitoring Cement Hydration, William J. McCarter and Ali B. Afshar, CP Jan. 87 p50-60.

B-Spline Terrain Modeling on a Personal Computer, Desmond J. Walton, CP July 87 p162-174.

Finite Element Microcomputer Well Drawdown System, John T. Christian and Denise Wilton Tripp, CP July 87 p143-161.

Microcomputer-Aided Optimal Plastic Design of Frames, Hojjat Adeli and Hui-Huang Chyou, CP Jan. 87 p20-34.

Microcomputer-Based Multiobjective Personnel Management Model, Steven C. Egly and Jeff R. Wright, CP Apr. 87 p114-127.

Microcomputers in Civil Engineering: Use and Misuse, J. Brent Gifford, CP Jan. 87 p61-68.

Multiple objective analysis

Microcomputer-Based Multiobjective Personnel Management Model, Steven C. Egly and Jeff R. Wright, CP Apr. 87 p114-127.

Municipal water

Expert System for Drought Management Planning, Richard N. Palmer and Robert M. Tull, CP Oct. 87 p284-297.

Optimal design

Microcomputer-Aided Optimal Plastic Design of Frames, Hojjat Adeli and Hui-Huang Chyou, CP Jan. 87 p20-34.

Optimization

Genetic Algorithms in Pipeline Optimization, David E. Goldberg and Chie Hsiung Kuo, CP Apr. 87 p128-141.

Interactive Layout Optimization of Trusses, H. Adeli and K. V. Balasubramanyam, CP July 87 p183-196.

Target Detection Probabilities for Continuous Line Search, Pinnaduwa H. S. W. Kulatilake and Shoung Ouyang, CP Jan. 87 p1-19.

Personnel management

Microcomputer-Based Multiobjective Personnel Management Model, Steven C. Egly and Jeff R. Wright, CP Apr. 87 p114-127.

Pile foundations

Expert Systems for Geotechnical Engineers, J. C. Santamarina and J. L. Chameau, CP Oct. 87 p241-252.

Pipe networks

LOTUS Spreadsheet Design for Storm Drain Networks, Kevin G. Brown and Antonis D. Koussis, CP July 87 p197-213.

Pipelines

Genetic Algorithms in Pipeline Optimization, David E. Goldberg and Chie Hsiung Kuo, CP Apr. 87 p128-141.

Plastic design

Microcomputer-Aided Optimal Plastic Design of Frames, Hojjat Adeli and Hui-Huang Chyou, CP Jan. 87 p20-34.

Preliminary design

Expert Systems for Structural Design, Mary Lou Maher, CP Oct. 87 p276-283.

Probability

Target Detection Probabilities for Continuous Line Search, Pinnaduwa H. S. W. Kulatilake and Shoung Ouyang, CP Jan. 87 p1-19.

Professional practice

Microcomputers in Civil Engineering: Use and Misuse, J. Brent Gifford, CP Jan. 87 p61-68.

Project planning

Expert System for Construction Planning, Chris Hendrickson, Carlos Zozaya-Gorostiza, Daniel Rehak, Eduardo Baracco-Miler and Peter Lim, CP Oct. 87 p253-269.

Pumping tests, wells

Finite Element Microcomputer Well Drawdown System, John T. Christian and Denise Wilton Tripp, CP July 87 p143-161.

Reservoirs

Boundary Element Method in Drawdown Seepage Analysis for Earth Dams, Ching S. Chang, CP Apr. 87 p83-98.

Route surveys

B-Spline Terrain Modeling on a Personal Computer, Desmond J. Walton, CP July 87 p162-174.

Rule induction tools

Software for Expert Systems Development, Leonard Ortolano and Catherine D. Perman, CP Oct. 87 p225-240.

Sand

Settlement of Footings on Sand by CPT Data, David J. Elton, CP Apr. 87 p99-113.

Scheduling

Expert System for Construction Planning, Chris Hendrickson, Carlos Zozaya-Gorostiza, Daniel Rehak, Eduardo Baracco-Miler and Peter Lim, CP Oct. 87 p253-269.

Seasonal variations

Microcomputer-Based Multiobjective Personnel Management Model, Steven C. Egly and Jeff R. Wright, CP Apr. 87 p114-127.

Seepage

Boundary Element Method in Drawdown Seepage Analysis for Earth Dams, Ching S. Chang, CP Apr. 87 p83-98.

Simulation models

Graphic Input to Cyclone, Leland S. Riggs, CP July 87 p175-182.

Small business

Use of Spread Sheets in Small Firms, James J. Yarmus, CP July 87 p217-219.

Soil modulus

Settlement of Footings on Sand by CPT Data, David J. Elton, CP Apr. 87 p99-113.

Soil settlement

Settlement of Footings on Sand by CPT Data. David J. Elton. CP Apr. 87 p99-113.

Spreadsheets

LOTUS Spreadsheet Design for Storm Drain Networks. Kevin G. Brown and Antonis D. Koussis. CP July 87 p197-213.

Use of Spread Sheets in Small Firms. James J. Yarmus. CP July 87 p217-219.

State-of-the-art reviews

Expert Systems in Construction: Work in Progress. David B. Ashley and rRaymond E. Levitt. CP Oct. 87 p303-311.

Storm drains

LOTUS Spreadsheet Design for Storm Drain Networks. Kevin G. Brown and Antonis D. Koussis. CP July 87 p197-213.

Structural design

Expert Systems for Structural Design. Mary Lou Maher. CP Oct. 87 p276-283.

Structural engineering

Expert Systems in Structural Engineering: Works in Progress. R. H. Allen. CP Oct. 87 p312-319.

Subsurface investigations

Target Detection Probabilities for Continuous Line Search. Pinnaduwa H. S. W. Kulatilake and Shoung Ouyang. CP Jan. 87 p1-19.

Taper

Tapered Beam and Column Elements in Unbraced Frame Structures. J. Dario Aristizabal-Ochoa. CP Jan. 87 p35-49.

Targets

Target Detection Probabilities for Continuous Line Search. Pinnaduwa H. S. W. Kulatilake and Shoung Ouyang. CP Jan. 87 p1-19.

Technology assessment

Expert Systems in Structural Engineering: Works in Progress. R. H. Allen. CP Oct. 87 p312-319.

Terrain models

B-Spline Terrain Modeling on a Personal Computer. Desmond J. Walton. CP July 87 p162-174.

Trusses

Interactive Layout Optimization of Trusses. H. Adeli and K. V. Balasubramanyam. CP July 87 p183-196.

Wastewater management

New Expert Systems in Environmental Engineering. Leonard Ortolano and Anne C. Steinemann. CP Oct. 87 p298-302.

Water levels

Boundary Element Method in Drawdown Seepage Analysis for Earth Dams. Ching S. Chang. CP Apr. 87 p83-98.

Water quality

New Expert Systems in Environmental Engineering. Leonard Ortolano and Anne C. Steinemann. CP Oct. 87 p298-302.

Water resources

New Expert Systems in Environmental Engineering. Leonard Ortolano and Anne C. Steinemann. CP Oct. 87 p298-302.

Water resources management

Expert System for Drought Management Planning. Richard N. Palmer and Robert M. Tull. CP Oct. 87 p284-297.

Work functions

Microcomputer-Based Multiobjective Personnel Management Model. Steven C. Egly and Jeff R. Wright. CP Apr. 87 p114-127.

AUTHOR INDEX

Adeli, H.
Interactive Layout Optimization of Trusses, with K. V. Balasubramanyam, CP July 87, p183-196

Adeli, Hojjat
Microcomputer-Aided Optimal Plastic Design of Frames, with Hui-Huang Chyou, CP Jan. 87, p20-34

Afshar, Ali B.
see McCarter, William J., CP Jan. 87, p50-60

Allen, R. H.
Expert Systems in Structural Engineering: Works in Progress, CP Oct. 87, p312-319

Aristizabal-Ochoa, J. Darlo
Tapered Beam and Column Elements in Unbraced Frame Structures, CP Jan. 87, p35-49

Ashley, David B.
Expert Systems in Construction: Work in Progress, with rRaymond E. Levitt, CP Oct. 87, p303-311

Balasubramanyam, K. V.
see Adeli, H., CP July 87, p183-196

Baracco-Miler, Eduardo
see Hendrickson, Chris, CP Oct. 87, p253-269

Brown, Kevin G.
LOTUS Spreadsheet Design for Storm Drain Networks, with Antonis D. Koussis, CP July 87, p197-213

Buyukozturk, Oral
see Sacks, Russel, CP Apr. 87, p69-81

Chameau, J. L.
see Santamarina, J. C., CP Oct. 87, p241-252

Chang, Ching S.
Boundary Element Method in Drawdown Seepage Analysis for Earth Dams, CP Apr. 87, p83-98

Christian, John T.
Finite Element Microcomputer Well Drawdown System, with Denise Wilton Tripp, CP July 87, p143-161

Chyou, Hui-Huang
see Adeli, Hojjat, CP Jan. 87, p20-34

Egly, Steven C.
Microcomputer-Based Multiobjective Personnel Management Model, with Jeff R. Wright, CP Apr. 87, p114-127

Elton, David J.
Settlement of Footings on Sand by CPT Data, CP Apr. 87, p99-113

Gifford, J. Brent
Microcomputers in Civil Engineering: Use and Misuse, CP Jan. 87, p61-68

Goldberg, David E.
Genetic Algorithms in Pipeline Optimization, with Chie Hsiung Kuo, CP Apr. 87, p128-141

Hendrickson, Chris
Expert System for Construction Planning, with Carlos Zozaya-Gorostiza, Daniel Rehak, Eduardo Baracco-Miler and Peter Lim, CP Oct. 87, p253-269

Koussis, Antonis D.
see Brown, Kevin G., CP July 87, p197-213

Kulatilake, Pinnaduwa H. S. W.
Target Detection Probabilities for Continuous Line Search, with Shoung Ouyang, CP Jan. 87, p1-19

Kuo, Chie Hsiung
see Goldberg, David E., CP Apr. 87, p128-141

Levitt, rRaymond E.
see Ashley, David B., CP Oct. 87, p303-311

Lim, Peter
see Hendrickson, Chris, CP Oct. 87, p253-269

McCarter, William J.
Automated Data Acquisition System for Monitoring Cement Hydration, with Ali B. Afshar, CP Jan. 87, p50-60
err: CP July 87, p221

Maher, Mary Lou
Expert Systems for Structural Design, CP Oct. 87, p276-283

Ortolano, Leonard
New Expert Systems in Environmental Engineering, with Anne C. Steinemann, CP Oct. 87, p298-302
Software for Expert Systems Development, with Catherine D. Perman, CP Oct. 87, p225-240

Ouyang, Shoung
see Kulatilake, Pinnaduwa H. S. W., CP Jan. 87, p1-19

Palmer, Richard N.
Expert System for Drought Management Planning, with Robert M. Tull, CP Oct. 87, p284-297

Perman, Catherine D.
see Ortolano, Leonard, CP Oct. 87, p225-240

Rehak, Daniel
see Hendrickson, Chris, CP Oct. 87, p253-269

Riggs, Leland S.
Graphic Input to Cyclone, CP July 87, p175-182

Sacks, Russel
Expert Interactive Design of R/C Columns Under Biaxial Bending, with Oral Buyukozturk, CP Apr. 87, p69-81

Santamarina, J. C.
Expert Systems for Geotechnical Engineers, with J. L. Chameau, CP Oct. 87, p241-252

Steinemann, Anne C.
see Ortolano, Leonard, CP Oct. 87, p298-302

Tull, Robert M.
see Palmer, Richard N., CP Oct. 87, p284-297

Walton, Desmond J.
B-Spline Terrain Modeling on a Personal Computer, CP July 87, p162-174

Wilson Tripp, Denise
see Christian, John T., CP July 87, p143-161

Wright, Jeff R.
see Egly, Steven C., CP Apr. 87, p114-127

Yarmus, James J.
Use of Spread Sheets in Small Firms, CP July 87, p217-219

Zozaya-Gorostiza, Carlos
see Hendrickson, Chris, CP Oct. 87, p253-269